

REMARKS

Entry of the foregoing, and further and favorable reconsideration of the subject application are respectfully requested. By the present amendment, claims 2, 3, 6, and 7 have been amended to delete their dependency from rejected claims. Claims 5 and 10 have been amended to incorporate the limitations of original claim 11. Claim 11 has been deleted without prejudice to or disclaimer of the subject matter contained therein. Claims 12-14 have been amended to change their dependency from canceled claim 11 to pending claim 10. Claim 8 has been amended to remove reference to transparent conductive oxides in the second electrode layer. Claim 15 has been amended to change its dependency from claim 1 to claim 7. These amendments derive support from throughout the specification and claims as originally filed.

Allowable Subject Matter

Applicants gratefully acknowledge the indication by the Examiner at page 6 of the Official Action that claims 2-4, 6, and 7 would be allowable if rewritten in independent form. By the present amendment, claims 2-4, 6, and 7 are no longer dependent from rejected claims. These amendments are made solely to expedite prosecution, and do not represent acquiescence by Applicants to any rejections.

Claim Rejections – 35 USC §112

Turning now to the Official Action, claim 15 is rejected under 35 USC §112, second paragraph, as purportedly indefinite. At page 3 of the Official Action, the Office asserts that the recitation of “the third and fourth electrode layers” in claim 15 lacks antecedent basis. Without conceding to the merits of the Office’s position, but

solely in an effort to expedite prosecution, claim 15 has been amended to depend from claim 7, rather than from claim 1. Applicants submit that clear antecedent basis for four electrode layers is found in claim 7. Accordingly, withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 USC §102

Claims 8 and 9 are rejected under 35 USC §102(e) as purportedly anticipated by Huang et al. (US 6,693,352). This rejection is respectfully traversed.

At page 4 of the Official Action, the Office asserts that Huang et al. discloses “a second electrode layer 37A laminated on the first electrode and including ITO, which is a compound selected from the group consisting of transparent conductive oxides and transparent conductive nitrides.” However, by the present Amendment, claim 8 has been amended to delete reference to transparent conductive oxides. Huang contains no teachings regarding transparent conductive nitrides, as required by claims 8 and 9. Accordingly, because Huang et al. does not disclose every limitation of claims 8 and 9 as required by 35 USC §102, withdrawal of this rejection is respectfully requested.

Claims 5 and 10 are rejected under 35 USC §102(b) as purportedly anticipated by Ho et al. (2002/0185732). This rejection is respectfully traversed.

At page 5 of the Official Action, the Office asserts that Ho et al. discloses “a solid solution of various oxides such as NiO/CoO, this a Ni—X solid solution.” However, current claims 5 and 10 require that the Ni—X solid solution “includes nickel (Ni) as a matrix metal, and X including at least one element selected from the

group consisting of group II elements, group VI elements, Sc, Y, Ge, Sn and Sb.” Ho et al. neither discloses nor suggests this recitation of claims 5 and 10. Accordingly, because Ho et al. does not disclose every limitation of claims 5 and 10 as required by 35 USC §102, withdrawal of this rejection is respectfully requested.

Claims 1 and 11-15 are rejected under 35 USC §102(b) as purportedly anticipated by Nitta et al. (US 6,281,526). This rejection is respectfully traversed.

Claim 1 requires “a first electrode layer laminated on a p-type gallium nitride layer ... and a second electrode layer laminated on the first electrode.” However, Nitta et al. describes a system in which “a [first] conductive electrode **26'** is deposited on a p-type contact layer **24**, and a [second] conductive electrode layer **34'** is deposited on an n-type contact layer **16**.” Col. 10, lines 19-22. Nitta neither discloses nor suggests a first electrode layer laminated on a p-type gallium nitride layer and a second electrode layer laminated on the first electrode, as required by the present claims.

Further, Applicants note that claim 11 has been deleted without prejudice to or disclaimer of the subject matter contained therein, thus rendering this rejection moot as it applies to claim 11. Claims 12-15 have been amended to depend, either directly or indirectly, from claim 10, which is not subject to the present rejection. Applicants thus submit that this rejection does not apply to current claims 12-15.

Accordingly, because Nitta et al. does not disclose or suggest every limitation of the rejected claims as required by 35 USC §102, withdrawal of this rejection is respectfully requested.

Conclusion

From the foregoing, further and favorable action in the form of a notice of allowance is believed to be next in order, and such action is earnestly solicited.

In the event that there are any questions concerning this paper, or the application in general, the Examiner is respectfully urged to telephone Applicants' undersigned representative so that prosecution of the application may be expedited.

Respectfully submitted,

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